

Serial No. 10/734,803

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IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1 1. (currently amended) An optical switch, comprising:
2 a first optical combiner for combining at least two optical pump signals to
3 produce a combined pump signal, and a second optical combiner for combining
4 an input data signal with the combined pump signal to produce a combined signal;
5 a non-linear optical element for imparting a ~~third-order~~ non-linear effect on the
6 combined signal; and
7 at least one optical splitter for separating the combined signal from said non-linear
8 optical element into respective generated optical bands;
9 wherein at least one of said at least two optical pump signals is controllably
10 modulated such that a logic sequence of said input data signal is controllably switched.

1 2. (original) The optical switch of claim 1, further comprising at least two optical
2 pump sources, each of said sources providing one of said at least two optical pump
3 signals, wherein at least one of said at least two optical pump sources is adapted to
4 controllably modulate its respective optical signal such that a logic sequence of said input
5 data signal is controllably switched and an output signal of said optical switch comprises
6 a multi-band switched optical signal.

1 3. (original) The optical switch of claim 1, wherein the frequency of said input data
2 signal is substantially equal to the average of the frequencies of said at least two optical
3 pump sources.

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